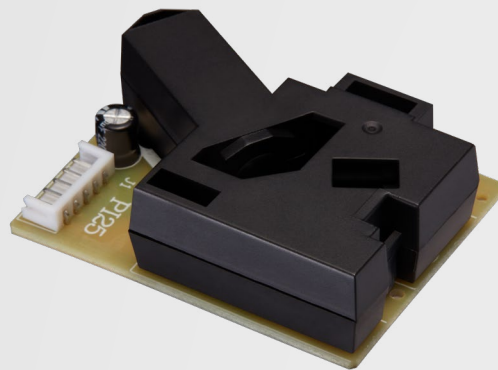


MPM20-AH



Infrared PM Sensor

The MPM20-AH series infrared PM sensor is a self-priming infrared PM sensor based on the principle of infrared light scattering. Its light source is an infrared LED light source. The LED emits light and produces reflected light when it encounters dust. Photosensitive detectors detect reflected light. Strong, determine the dust concentration based on the size of the pulse signal.

The MPM20-AH series has a built-in heater and can achieve automatic air intake without the need for an air pump. PM2.5 with smaller inertia will be semi-floating, making it easier for photoelectric sensors to detect it. It uses the same principles as the particle calculator to detect the absolute number of particles per unit volume.

HVAC



Fresh air system



Industrial testing



Smart energy



Smart home



Smart building



Features

- Automatic temperature compensation calibration, high detection accuracy
- Mini and lightweight, easy to integrate into end products
- High cost performance
- Automatic air intake, free from external interference
- Anti-static injection molded shell to shield electromagnetic interference

Product parameters

Principle	Infrared light scattering
Detect particle diameter	Approximately 0.5 μ m or more
Detection concentration range	$\leq 500\mu\text{g}/\text{m}^3$
Detect consistency errors (@ voltage 5.0V 25°C 50%RH)	$\pm 25\mu\text{g}/\text{m}^3$ (@0~100 $\mu\text{g}/\text{m}^3$) $\pm 25\%$ (@100~500 $\mu\text{g}/\text{m}^3$)
Power on stable time	About 1 minute after turning on the power
Output method	PWM pulse output or IIC digital interface output
Working voltage	DC 5V $\pm 5\%$; Voltage ripple below 50mV
Working current	90mA
Working temperature	0~50°C
Working humidity	0~95%RH (Non condensation)
Storage environment	-20~60°C
Size	59*45 *22(mm)
Lifespan	≥ 8 years

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